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# Reporting Earnings per Share: Evidence from Portuguese Annual Reports

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**Title:**

*Reporting Earnings per Share: Evidence from Portuguese Annual Reports*

**Abstract:**

The importance of the Earnings per Share (EPS) has been increasing in the last decade and its disclosures have become more common. Still, there are no studies about EPS financial reporting in Portugal. Being so, this project offers a first analysis of EPS financial reporting in Portugal, reviewing the regulation, providing evidence on the current practices and presenting recommendations to improve them. It concludes that not all of the Portuguese companies are in compliance with regulation (IAS 33) regarding EPS; they only voluntarily disclose what is more favorable and the crisis of 2010 had a great impact on EPS amounts.

**Words:**

Earnings per Share, Financial Reporting, Disclosures, Portugal, IAS 33.

## 1. Introduction

In the last decade an increasing number of companies have been reporting Earnings per Share (EPS) in their press releases (Harrison and Morton 2010). Indeed EPS is present in most of the text books in accounting and finance, and is one of the most popular numbers cited in the financial press and business publications.

The presentation of EPS figures became more frequent during the 1950's, in USA (Zhang, 2008). Still, only in 1969 the Accounting Principles Board (APB) issued the first official accounting pronouncement that required the presentation of EPS, which was Opinion No. 15, *Earnings per share* (AICPA 1969). Later in 1997, in an attempt to simplify the EPS regulation, FASB issued SFAS No.128, *Earnings per Share*, which is the current standard guiding EPS disclosures and computation in USA and IASB issued IAS 33, which is the standard adopted by European Union and many other countries<sup>1</sup>. Since then, both standards are developing numerous convergence projects<sup>2</sup> in order to assure its quality and comparability.

In the case of Portugal<sup>3</sup>, the adoption of IAS 33 was set from 2005 onwards. Since then, Portuguese companies with securities traded on EU regulated markets are required to present their consolidated financial statements according to IAS/IFRS as established by the EC Regulation No. 1606/2002.

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<sup>1</sup> For instance, in Hong Kong, Australia and New Zealand their EPS standards are all equivalent to IAS 33. The adoption of IFRS by other countries can be verified in: PWC. 2011. "IFRS Adoption by Country", [http://www.pwc.com/us/en/issues/ifrs-reporting/assets/ifrs\\_country\\_adoption.pdf](http://www.pwc.com/us/en/issues/ifrs-reporting/assets/ifrs_country_adoption.pdf), accessed on May 8<sup>th</sup>.

<sup>2</sup> The efforts of the Boards to converge the standards are demonstrated in several published exposure drafts: Financial Accounting Standards Board. 2005. "Earnings per Share an amendment of FASB Statement no.128." and International Accounting Standards Board. 2008. "Simplifying Earnings per Share, proposed amendments to IAS 33."

<sup>3</sup> Before 2005, the computation of EPS was indicated by *Comissão de Normalização Contabilística, directriz contabilística nº 20*, published by *Diário da República, Série II, Nº 179, 3.11*. Still, there was some discussion regarding the obligation to adopt this standard.

Formally, the definition of EPS is the portion of a company's profit that is allocated to each outstanding share of common stock<sup>4</sup> and it reflects a company's profitability and strength. Both analysts and investors are dedicated users of EPS, relying on this metric to evaluate a company's past and present performance and also to evaluate a certain stock. EPS is also part of two other significant ratios for shareholders: the Price-to-earnings ratio (PER) and the Earnings yield<sup>5</sup> and it allows for more valid and useful comparison between companies than the Dividends yield or Net Income<sup>6</sup>, because it is not affected by companies' distribution policies and it represents the income per unit of ownership.

Even though, there is a great variety of studies on EPS due to its meaningful significance, to the best of our knowledge there is not any research about EPS reporting by Portuguese companies similar to this one, exposing an opportunity to research this country<sup>7</sup>. In this context, this research project aims at studying the concepts subjacent to EPS and its components, the specificities of its calculation, the related accounting regulation, and previous studies about EPS. The focus is placed on Portuguese companies and its financial reporting practices.

As to the structure of this report, the following section provides a definition of the main concepts that will be discussed. Section 3 elucidates on the accounting EPS regulation and previous research on EPS. Section 4 presents the research questions and methodology as well as the composition of the sample. Section 5 discusses the results

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<sup>4</sup> The terms *share* and *stock* are indistinctly used along this report.

<sup>5</sup> The PER is a valuation ratio that compares the market value per share with EPS. The Earnings Yield shows the percentage of each dollar invested in the stock that was earned by the company and it is the inverse of the PER ratio.

<sup>6</sup> The Dividend Yield compares how much a company pays out in dividends each year with its share price. Net Income or Earnings are basically companies' profits. They are the revenue that comes from selling something or render services, subtracted by the costs to produce it.

<sup>7</sup>There is one study on EPS and Portugal. Still, it is not similar to this research, focusing only on the analysis of NIC 33: Alves, Sandra. 2006. *Resultados por Acção – Especial Ênfase na Análise da NIC 33*. Lisboa: Publisher Team.

obtained, along with some possible causes for them, and Section 6 summarizes the main conclusions, contributions and limitations of this research.

## 2. Defining EPS

EPS is simply a profit figure divided by a number of shares. (Mirza, Holt, and Orrell, 2010). When analyzing companies' performance EPS is also a better indicator to rely on than **net income**. Net income does not take into account companies' size, so there can be two different companies producing the same income and that does not necessarily mean that both are performing well. The general formula to compute EPS is presented in equation [1] and it will be further developed on this report:

$$EPS = \frac{\text{Net Income}}{\text{Number of Shares Outstanding}} \quad [1]$$

The numerator represents a major component of EPS. It should be stressed that **Net income or earnings** are the ones attributable to common shareholders<sup>8</sup>, which are equal to net income minus preferred dividends paid. Since, preferred shareholders have preferential treatment over common shareholders, they usually give up the right to share the corporation's earnings that are in excess of their dividends<sup>9</sup> clearing up why they do not have to look at EPS figures.

The second component of EPS is the number of shares issued by the company. This denominator allows measuring common shareholder's claim to income on a per-unit basis. As to the calculation of EPS's denominator, a weighted average of shares

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<sup>8</sup> Earnings available to common shareholders are the profits remaining after the company pays all of its suppliers, employees, service providers and preferred shareholders.

<sup>9</sup> The dividends received by preferred shareholders are fixed dividends, so preferred stocks can be valued as a constant growth stock with a dividend growth rate equal to zero. To determine the earnings of preferred shareholders the following equation can be used:  $D_p = (P_p * r)$ , where  $D_p$  is the preferred dividend;  $P_p$  is the preferred stock price; and  $r$  is the required return on the stock.

outstanding should be used because it is likely for the number of shares out in the market to fluctuate during the period, given that companies issue shares and buy back shares over time.

## 2.1. Basic EPS

From the general equation [1] it is possible to evolve for equation [2], which represents the basic EPS calculation.

$$\text{Basic EPS} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Weighted Average of Common Shares Outstanding}} \quad [2]$$

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Basic EPS does not take into account the dilutive effects<sup>11</sup> on convertible securities; hence it becomes a more useful metric for companies with simple capital structures, that is, those companies that have not issued any potential dilutive securities.

For the computation of Basic EPS, common and preferred stock are the most relevant types of stocks. **Common stock**, also known as *ordinary shares*, are subordinated to preferred stock, which means they only receive their dividends after preferred stock receives theirs. It carries the right of vote on diverse matters, being able to influence the corporation. There is no fixed dividend for common stock; it varies depending on the company's earnings, reinvestment and efficiency. **Preferred stock** has properties of both equity (potential appreciation) and debt (fixed dividends). Despite the fact that they are senior to common stock, they carry no voting rights<sup>12</sup>.

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<sup>10</sup> It should be stressed that dividends on both common and preferred stock are not expenses and therefore they do not reduce income. However, the preferred stock dividends do seize some of the company's income stream that would otherwise benefit common shares and that is why they have to be deducted in the numerator of the formula.

<sup>11</sup> *Dilutive effects* are a reduction in EPS or an increase in loss per share resulting from the assumption that convertible instruments are converted, that options or warrants are exercised, or that ordinary shares are issued upon the satisfaction of specified conditions (IAS 33.5). This subject will be further explored on this report.

<sup>12</sup> Other types of shares include **Treasury shares**, which are kept by companies in their own treasury; they have no voting rights, do not pay any dividends and cannot be included in the outstanding shares

## 2.2. Diluted EPS

Dilutive EPS measures the company's EPS if all convertible securities were exercised. It is a more conservative metric than basic EPS because it represents the worst-case scenario. It assumes that everyone holding dilutive securities will convert them into shares all at once, which is something unlikely to happen. Investors pay attention to the difference between basic EPS and dilutive EPS; if this difference is too big the company has high potential dilution for its shares, which is something both investors and analysts do not appreciate.

To compute diluted EPS both the numerator and denominator of equation [2] have to be adjusted for the effects of dilutive securities. Table 1 enumerates the four variables that may explain dilution: **(1) stock options, (2) warrants, (3) convertible bonds, and (4) convertible preferred stock.**

Table 1 – Dilutive Securities

Type	Definition	Price/Risk/Return
<b>Stock options</b>	The buyers have the right, but not the obligation, to buy (if it is a call option) or sell (if it is a put option) a stock at a pre-agreed price within a certain period or on a specific date.	Options carry a high risk but they also can generate substantial profits.
<b>Warrants</b>	The holders have the right to purchase securities (usually equity) from the issuer at a specific price within a certain time period.	Warrants' prices are low. They bear a high-risk but also a high-return.
<b>Convertible bonds</b>	Bonds that can be converted into a predetermined amount of company's shares at certain times during its life.	Bonds prices fall as interest rates go up and vice-versa. Generally these bonds offer lower rates of return in exchange for the value of the option to trade the bond into stock. Risk is lower, since it provides coupon payments and the return of principal upon maturity.
<b>Convertible preferred stock</b>	Shares with an option for the holder to convert them into a fixed number of common shares after a predetermined time or on a specific date.	The price of convertible preferred shares falls as interest rates go up and vice-versa. They carry a low risk given that they offer a fixed income.

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calculations. **Bearer shares** are completely owned by whoever holds the physical stock certificate; dividends to bearer shares are paid when a physical coupon is presented to the company. Contrarily, **Nominative shares** name the person who owns them, offering more security to the owner. They don't need to be registered reinforcing security and privacy as well. However they are more difficult to transfer to other people.

The opposite of dilution is **anti-dilution** (see table 2) and it occurs when there is a retirement of shares, generally through a buy-back of shares by the company. This originates a decrease in the number of shares outstanding (denominator), thus increasing EPS. The effects of anti-dilutive potential ordinary shares must be ignored when calculating diluted EPS (IAS 33.41)<sup>13</sup>.

Table 2 - Basic EPS versus Diluted EPS

Simple Capital Structure	Complex Capital Structure	
	Dilution	Anti-dilution
<b>Basic EPS = Diluted EPS</b>	<b>Basic EPS &gt; Diluted EPS</b>	<b>Basic EPS &lt; Diluted EPS</b>

### 3. Literature review

This section summarizes the EPS accounting regulation followed by the normative and empirical research about EPS.

#### 3.1. Accounting regulation about EPS

The vast majority of the world's large businesses are now reporting under one of the two comprehensive systems of accounting and financial reporting rules: US GAAP and IAS/IFRS (Epstein and Jermakowicz, 2010). The specific standards guiding EPS reporting are Statement of Financial Accounting Standards No. 128 (SFAS 128) and International Accounting Standard No. 33 (IAS 33), respectively.

Since 2005, European Union (EU) follows IAS/IFRS<sup>14</sup> standards as established by the EC Regulation No. 1606/2002, while USA companies report under the FASB US

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<sup>13</sup> There are also others effects, which are not the core of this work that may ensue, causing changes in the denominator of EPS as well. It is the case of stock dividends and stock splits both increasing the number of shares of companies. The former is a dividend payment made in the form of additional shares, and the latter is when a company divides its existing shares into multiple shares, keeping the market capitalization unchanged.

<sup>14</sup> The International Accounting Standards Board (IASB) was originated in 2001 and it became responsible for the preparation and issuance of International Financial Reporting Standards (IFRS). IASB implemented the body of International Accounting Standards (IAS) that had been issued by its antecedent, the International Accounting Standards Committee (IASC).



GAAP<sup>15</sup>. Both standards refer to recognition, presentation, measurement, and disclosures of EPS in companies' annual reports. Their main goal is to establish recognized principles for computing and presenting EPS amounts in order to improve performance comparisons between different entities and between different periods for the same entity (IAS 33.1). There has been an effort along the years, by the two boards: IASB and FASB, to make high-quality, compatible accounting standards that could be used for worldwide financial reporting simplifying comparisons between companies from different countries. For this reason, both standards are very similar now<sup>16</sup>.

### **3.2. Previous Research on EPS**

The previous research on EPS is very extensive. Still, studies on EPS reporting in Portugal are almost non-existent hence it is an important topic to be developed. The studies on EPS can be grouped according to regulation history: some were developed at the time APB Opinion 15 was in force, and others are more recent, relative to the issuance of SFAS 128 and IAS 33. A table summarizing the literature review in each of these groups is provided in Section 9.2.

#### ***1<sup>st</sup> Group: APB Opinion 15, PEPS and FDEPS before SFAS 128 and IAS 33.***

When APB Opinion no. 15 was issued in 1969, the goal was to standardize EPS reporting, providing guidance for companies to compute EPS on a consistent basis. This pronouncement required dual presentation of primary EPS (PEPS)<sup>17</sup> and fully diluted EPS (FDEPS)<sup>18</sup>, which lead to several criticisms derived from the complexity under the

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<sup>15</sup> The Financial Accounting Standards Board (FASB) is a private organization responsible for establishing and improving standards of financial accounting and reporting in the United States for nongovernmental entities, since 1973.

<sup>16</sup> Section 9.1 elucidates on some main similarities and differences in reporting EPS under each of the standards.

<sup>17</sup> Primary EPS (PEPS) is based on the number of common shares outstanding and the equivalent number of common shares of those securities which *Opinion No. 15* defined to be equivalent to common stock and which have a dilutive effect (Frank and Weygandt 1970).

<sup>18</sup> Fully Diluted EPS (FDEPS) are based on the assumption that all dilutive securities are converted into common shares during the fiscal year (Jerris, Scott I. 1992).

calculation of PEPS to determine possible future dilution. Hence, before the 1990s, many papers were developed to discuss the computation of PEPS: Frank and Weygandt (1970), Gibson and Williams (1973), and Rhodes and Snively (1973). These studies focus mainly on common stock equivalents and they all conclude that Opinion 15 has not an effective measure of common stock equivalency because it has not a good predictor of future conversion. In this context, Frank and Weygandt (1970) and Arnold and Humann (1973) both propose alternative tests to determine common stock equivalency of convertible bonds, like the ratio of conversion value to call price and the conversion value to market price, respectively. Shank (1971) studied the relationship between PEPS and stock prices at the time of APB 15, highlighting problems within the computation of EPS under the treasury stock method, proposed by APB 15. Curry (1971) also criticizes the common stock equivalent method used by APB 15, suggesting an alternative way to report convertible debt. Frankfurter and Horwitz (1972) believe Opinion 15 rules are problematic, concluding that it causes an administrative burden without any significant improvements over the traditional method of calculation. Barlev (1983) investigates the modified treasury stock method. In general these studies focus on conversion predictability and all agree that APB's methods are often misunderstood and do not provide a good prediction of future conversion.

***2<sup>nd</sup> Group: SFAS 128 and IAS 33 and Basic and Diluted EPS.***

When the current standards were issued a new set of studies was developed to explore the changes in regulation, making comparisons, exploring new relations between EPS and other variables and investigating alternative measures of EPS. Jennings, LeClere and Thompson (1997) empirically studies how basic, primary and fully diluted EPS can explain variations in stock prices at the time SFAS 128 was adopted. They conclude that FEPS explains stock prices movements better than both

basic EPS and PEPS and that SFAS 128 provides investors and analysts better information because of its enhanced requirements. Gregor Andrade (1999) confirms the impact of changes in future EPS and dilution on stock prices; Huson, Scott and Wier (2001) analyze the effect of dilution on the earnings/return relation and conclude that dilutive securities attenuate the relation between earnings and returns since accounting earnings are significant lower when convertible shares exist.

Within this group, some studies focus on creating alternative measures of EPS, using Option Valuation Models. It is the case of Vigeland (1982) who addresses the problem of treating dilutive securities in the calculation of EPS and suggests the use of equilibrium pricing models for stock options and convertible securities to calculate EPS, claiming its advantages over the previous methods. Jerris (1992) uses the Black and Scholes option pricing model to create alternative measures of EPS based on future conversion probability. Core, Guay and Kothari (2002), show that the FASB treasury-stock method understates the dilutive effect of stock options, overstating reported EPS. Also, Casson and McKenzie (2007) criticize the methods for computing EPS defined by FASB (1996) proposing a benchmark model to compute basic EPS and diluted EPS. In general, this sub-theme inside the second big group of studies is comprised by papers that commonly introduce the option prices in the theoretical model of EPS.

In Portugal, one publication can be found: Alves (2006) investigates the international guidelines on EPS, centering on IAS 33. This is a normative study, while this work project is empirical. The latter also concentrates in Portugal but it covers the companies' practices when reporting EPS, which was never done before. It can be included in the second group of studies, since it refers to the current accounting regulation on EPS: SFAS 128 and IAS 33. It focuses mainly on IAS 33, since it is the indicated standard to Portuguese companies, which constitute the sample under study for this work.

## 4. Research Questions and Methodology

This section introduces the research questions (RQ), and describes the methodology to answer them. It also reveals the criteria for the selection of companies for the sample, the periods under analysis, and the data.

### 4.1 Research Questions

The purpose of this report is to analyze the patterns of EPS financial reporting and disclosures by Portuguese companies and perceive if they are in compliance with accounting regulation, a topic that is poorly developed until now. Hence, **the fundamental research question** is: *How are Portuguese Companies reporting Earnings per Share?*

After characterizing the companies in the sample regarding its SGPS status and industry and analyzing some related descriptive statistics, four questions are addressed, as follows:

*RQ1: Are companies presenting EPS in accordance with the regulation?*

*RQ2: Are companies additionally commenting on EPS in the management report?*

*RQ3: Are companies disclosing notes on EPS in harmony with regulation?*

*RQ4: Do companies have dilutive effects?*

*RQ5: What reasons explain the differences between basic and diluted EPS?*

These five questions intend to characterize the financial reporting by Portuguese listed companies. In order to understand possible causes for the results obtained some associations were made regarding the companies' SGPS status, and the external economic environment in Portugal.

Moreover, the Database particularly created for this project includes the essential variables needed to characterize the sample of Portuguese companies and to answer to the research questions. The univariate analysis to some of these variables is discussed,

as well as bivariate analysis (through marginal frequencies and by mixing variables in pairs), in order to unveil the specificities of EPS financial reporting in Portugal.

#### **4.2. Sample and Data**

The population under analysis for this work is the Portuguese 47 companies listed in the Euronext Lisbon (on March 2, 2012). The criterion for sample selection is the availability of information, the importance of the companies, and the regulatory accounting framework that they apply. Since these are public companies, they should report EPS according to IAS 33 and publish their annual consolidated accounts. Therefore, it was not difficult to have access to these companies' information and financial statements. These reports are also highly credible, as they are double audited.

The EPS amounts were collected from each company's annual report, which are available at companies' web sites and the Stock Market Authority website. The use of these two alternative data sources had the purpose of data validation. Within the annual reports, EPS amounts are gathered from the face of the consolidated income statement (at the bottom) and additional information on the computation of EPS is gathered from the notes to the consolidated accounts (as prescribed by IAS 33.66 and IAS 33.70, respectively). Plus, there can be some additional references or comments to EPS in the management report, if companies voluntarily mention it. The collected EPS amounts respect to consolidated accounts only, due to the specification of IAS 33 that mentions that if both parent and consolidated statements are presented in a single report, EPS is required only for the consolidated statements (IAS 33.4).

The initial sample comprises all the 47 companies listed in Euronext. However one company (Vista Alegre Atlantis SGPS) is excluded from the sample, due to

bankruptcy issues and to the presentation of non coherent values of EPS<sup>19</sup>. Thus, the final sample amounts to 46 companies (**Appendix 1**). The research covers the years of 2009 and 2010, that is, the two most recent reporting periods, seeing as many companies do not have the consolidated annual report of 2011 available yet.

Throughout the process of data collection, a database was created, in Excel format, with the relevant data collected from the companies' reports<sup>20</sup>. This database is a contribution of this research project. Section 9.4 provides a table with all the EPS values of Portuguese companies registered in 2009 and 2010.

## 5. Results

This section analyzes of the data regarding Portuguese companies comprising the sample and the answers to the research questions revealed in section 4. Some possible causes for the obtained results are also discussed.

### 5.1. Data analysis

In order to characterize the sample of companies under study, Fig.1 shows that 59% (27) of Portuguese companies are *Sociedade Gestora de Participações Sociais* (SGPS)<sup>21</sup>. This status, also known as being a holding, is characterized by enterprises which

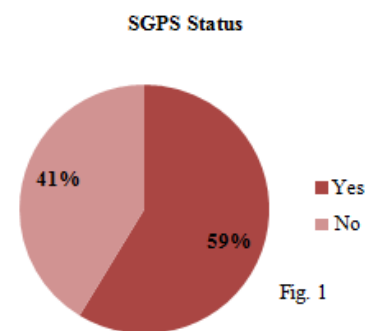


Fig. 1

administrate a group of companies, owning the majority of the shares of the companies comprised in the group. A characterization of the companies by industry was also done

<sup>19</sup> In 2009, Vista Alegre Atlantis and Visabeira were negotiating a possible acquisition of Vista Alegre Atlantis given the fragile financial situation of the company. Available at <http://economia.publico.pt/Noticia/porque-e-que-a-visabeira-quer-comprar-a-vista-alegre-1357278> (accessed on May, 2012).

<sup>20</sup> This database contains forty-five columns with twenty-two different variables and forty-six lines, each representing one company. Some tables and graphs with several analyses are also included.

<sup>21</sup> Appendix 8.1 illustrates the final sample, specifying the companies within the sample and whether they are SGPS or not.

(Section 9.3).

Subsequently, it would be clarifying to perceive which companies are disclosing a loss per share and a profit per share, for both basic and diluted EPS, for 2009 and 2010. Table 3 shows that in 2010 there is an increase in the number of companies with basic loss per share, which represent 19.6% of the sample compared to 17.4% in 2009. For diluted EPS the sample is only of 45 companies<sup>22</sup>. Once again, there are more companies with diluted loss per share in 2010 than in 2009 – 17.8% against 15.6%, respectively. This illustrates how 2010 was a worst year for Portuguese companies due to the Financial Crisis that started in the beginning of 2010 and that is still taking place in Portugal. This is a major political and economic crisis, caused by the long Government encouragement to over expenditure and investment bubbles and fueled by risky credit and high levels of public debt. This whole economic conjuncture being lived in Portugal and in Europe is clearly not favorable for Portuguese companies, explaining the worst EPS results registered in 2010 and also the lowest levels of EPS that can be verified even for the Portuguese companies with profit per share.

Table 3 – Number of Companies with Loss per Share and Profit per Share in 2009 and 2010.

	Basic EPS		Diluted EPS	
	2009	2010	2009	2010
<b>Loss per Share</b>	8 (17.4%)	9 (19.6%)	7 (15.6%)	8 (17.8%)
<b>Profit per Share</b>	38 (82.6%)	37 (80.4%)	38 (84.4%)	37 (82.2%)
<b>Total</b>	46 Companies (100%)		45 Companies (100%)	

According to table 4, in 2009 the average of basic EPS results for companies with profit per share is 0.19€ while the average of diluted EPS is 0.26€. In 2010, there is a

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<sup>22</sup> One company (Sporting, Futebol SAD) does not refer to diluted EPS and thus, cannot be considered for this specific analysis.

slight increase on basic average for 0.28€, while diluted average decreased to 0.24€. The average of basic EPS results for companies with loss per share remained at -0.38€ in 2009 and 2010, while the average of diluted EPS increased 0.15€ for the same period<sup>23</sup>.

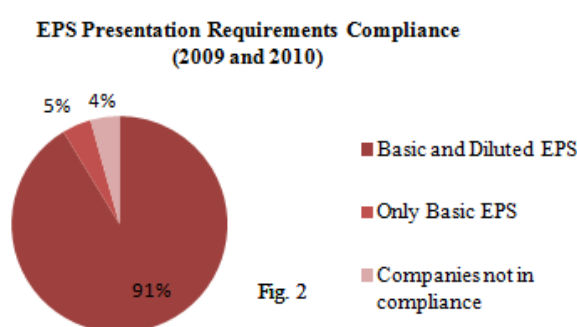
Table 4 – Descriptive Statistics of EPS amounts in 2009 and 2010.

Descriptive Statistics (€)	Basic EPS			Diluted EPS		
	2009	2010	Variation (2010-2009)	2009	2010	Variation (2010-2009)
Average (profit per share)	0.19	0.28	0.09	0.26	0.24	-0.02
Average (loss per share)	-0.38	-0.38	0	-0.43	-0.28	0.15
Median	0.13	0.13	0	0.13	0.14	0.01
Minimum	-2.32	-1.26	1.06	-2.32	-0.83	1.49
Maximum	1.08	1.35	0.27	1.08	1.35	0.27

### ***EPS Presentation Compliance (RQ 1)***

According to IAS 33, an entity whose securities are publicly traded (or that is in process of public issuance) must present, on the face of the statement of comprehensive income, basic and diluted EPS (IAS 33.66).

Furthermore, basic and diluted EPS must be presented with equal prominence for all periods presented (IAS 33.66). Ninety one per cent of the Portuguese companies are



<sup>23</sup> In 2009 the minimum result of both basic and diluted EPS was -2.32€ and was recorded by Sport Lisboa e Benfica SAD. In 2010 the minimum basic EPS amount of -1.26€ belonged to Sporting, SAD. The 2010 minimum diluted EPS of -0.83€ derived from Sport Lisboa e Benfica SAD, once again. The maximum EPS results of 2009 are from Martifer, SGPS and the ones in 2010 belong to Brisa.



following IAS 33 presentation requirement, disclosing both basic and diluted EPS in the income statement.

However, it is possible to stand out Banif SGPS and Imobiliária Construtora Grão-Pará as two Portuguese companies that are not in compliance with IAS 33 not presenting any EPS values in the consolidated income statement. In addition, 5% of the companies do not present diluted EPS in the income statement, namely Galp Energia SGPS, and Sporting, SAD. The regulation states that if basic and diluted EPS are equal, dual presentation can be accomplished in one line in the statement of comprehensive income (IAS 33.67). So, the two mentioned companies are not necessary disobeying the accounting rules. Galp Energia SGPS clearly states in its report that “*as there are not dilution situations, then diluted EPS is equal to basic EPS*”. Hence, it only presents basic EPS in the income statement. Sporting, SAD, does not even specify if diluted EPS is equal to basic EPS. The reader can only assume they are equal, since the report only refers to basic EPS. Plainly, this company should improve and clarify this issue. When only basic EPS is presented in the income statement, then a note should be added clarifying that diluted EPS is equal to basic EPS, if that is the case.

In view of discovering some possible associations, marginal frequencies are computed between the variable of being SGPS and the compliance of presentation requirements. The data reveals that only two companies being SGPS (out of 27) do not fulfill presentation requirements.

#### ***Additional EPS comments on the Management reports (RQ 2)***

According to the Fig.3, 96% of the companies are not referring to EPS along the management report. The remaining 4% represented by two companies are an exception: Galp Energia SGPS stands out by including the EPS values in a table that summarizes the main financial indicators for shareholders and also in a graph (along with dividends

per share). In addition, Sonae SGPS management report refers to EPS values in the chairman message, pointing out the increase in this ratio in 2010 compared to 2009.

Overall, there are very few mentions to EPS in the management reports and the two companies that do mention it both present an increase in EPS ratio from 2009 to 2010. Perhaps, this is a sign that companies

only voluntarily present what is more convenient for analysts to see, since none of the companies voluntarily mentions a decrease in EPS. Besides, 2010 is a crisis year

and most of EPS results were not very favorable for Portuguese companies, which reduces the probability of companies commenting more than what is mandatory.

**EPS additional references in the management report (2009 and 2010)**

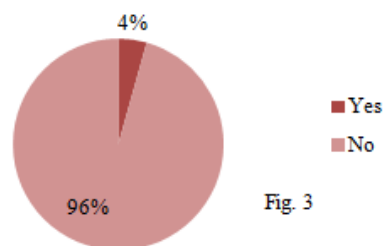


Fig. 3

### ***EPS Disclosures under the Notes (RQ3)***

IAS 33 states that companies should disclose the notes to the consolidated statements in the annual reports. IAS 33.70 prescribes that companies must disclose the amounts used as numerators in calculating basic EPS and diluted EPS, the weighted average number of ordinary shares used as denominator, the instruments that could potentially dilute basic EPS in the future and a description of ordinary share transactions or potentially ordinary share transactions that occur after the balance sheet date and that would have changed significantly the number of ordinary shares or potential ordinary shares outstanding at the end of the period if those transactions had occurred before the end of the reporting period.

**EPS Disclosure Requirements Compliance (2009 and 2010)**

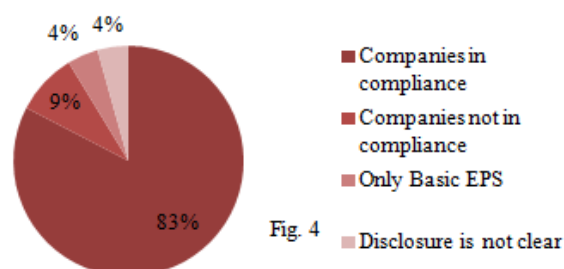


Fig. 4

Fig. 4 shows that the majority of Portuguese companies (83%) are disclosing all the calculations needed to compute basic

and diluted EPS. The most used format of disclosure is the presentation of a table summarizing the values used as numerators, denominators and the final values of basic and diluted EPS. In most of the cases, companies add a note to these tables stating that there were not dilutive instruments in the years under consideration (2009 and 2010). Still, there are some specific cases not following this format as showed by Fig.4. Nine per cent of the companies are not in compliance with disclosure rules: BPI, Imobiliária Construtora Grão-Pará, and Sporting, SAD do not disclose any notes regarding EPS. Sumol+Compal, indicates in its notes how to compute EPS according to IAS 33, but it does not disclose the values considered to the calculation. It only states that basic and diluted EPS were obtained dividing the earnings attributable to common shareholders by the weighted average number of ordinary shares. This is the statement of IAS 33, and it should not be the presented by companies without the actual values of computation because if all the companies disclosed like that, comparability of disclosures would be 100% but usefulness would be almost null. Corticeira Amorim, SGPS and Fisipec represent 4% of the sample disclosing a table with the computation of basic EPS only. Diluted EPS is not referred and even though these companies have no dilutive instruments (making the computation of basic EPS equal to diluted EPS) it should be added a note explaining this situation. Besides, Fisipec is the single company disclosing only the year of 2010 while the others also present the year of 2009, so that a comparison between the two years' results can be easily done. The last 4% of the sample concerns to disclosures that are not plain: Sport Lisboa e Benfica, SAD, does not present a note on EPS, but mentions it in the Equity note. However, the computation of EPS is not clear in this note<sup>24</sup>. In addition, SAG GEST SGPS elucidates on the calculation of dilutive EPS but it is not lucid in the computation of basic EPS.

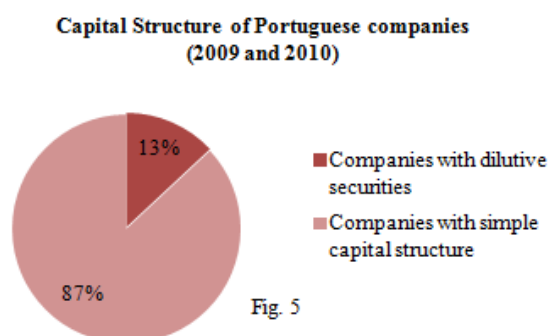
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<sup>24</sup> The Equity note explains the analysis of Equity and it ultimately presents the basic and diluted EPS for

Once again, marginal frequencies indicate 25 SGPS companies (out of 27) in compliance with disclosure requirements. None of the companies comments anything related to EPS performance evolution in the notes. Companies merely refer the values subjacent to EPS results, not voluntarily adding anything more to the notes.

#### ***Dilutive effects (RQ 4)***

From the EPS values of Portuguese companies one main aspect stands out right away: it is not very common for Portuguese companies to have dilutive instruments in its capital structure. That is why the



majority of the companies show no difference between basic EPS and diluted EPS. Still, the four types of dilutive effects described under section 2.2 represent 13% of the sample. Cimpor SGPS includes stock options in its capital structure even though it is not a relevant amount to make basic EPS different from diluted EPS. Actually, basic and diluted EPS for Cimpor SGPS, have not changed at all in 2009 and 2010 (remaining 0.36€). Cofina SGPS is the only Portuguese company reflecting a dilution effect of warrants, that causes a difference of 0.03€ between basic and diluted EPS in 2009. EDP also registers a dilution effect of stock options in 2009 and 2010. However this is not a significant effect since basic and diluted EPS remain equal within the period. Martifer, SGPS has stock options in its capital structure as well. Still, for the year of 2010 these stock options do not have a dilution effect as the exercise price of the options is bigger

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2009 and 2010 (both consolidated and individual). Still, no numerators or denominators are disclosed, thus the reader cannot understand which values were considered to compute EPS.

than their market price<sup>25</sup>. Novabase, SGPS registers a very small dilution effect of stock options in 2009. The difference between basic and diluted EPS of Novabase, SGPS in 2010 is only of 0.01€. Additionally, Portugal Telecom, SGPS reflects the effect of convertible bonds on EPS<sup>26</sup>. The size of this effect is not very significant as well: in 2009 diluted EPS is 0.02€ smaller than basic EPS; and in 2010 there is no difference between basic and diluted EPS.

Overall, Portuguese companies do not usually have dilutive securities in its capital structure. In the few existing cases of companies having these types of securities, the dilutive securities do not have a relevant effect on dilutive EPS. Sometimes, the effect is even zero. The above information is detailed in table 5 where it can be verified that the size of the dilution effects are very small within the Portuguese companies.

Table 5 – Dilutive effects in Portuguese companies in 2009-2010.

Companies with Dilutive Instruments	Dilutive Instruments		Basic EPS minus Diluted EPS (2010)	Basic EPS-Diluted EPS (2009)
	2010	2009		
Cimpor, SGPS	Stock Options	Stock Options	0	0
Cofina SGPS	-	Warrants	0	0.03€
EDP	Stock Options	Stock Options	0	0
Martifer, SGPS	Stock Options	-	0	0
Novabase, SGPS	-	Stock Options	0	0.01€
Portugal Telecom, SGPS.	Convertible Bonds	Convertible Bonds	0	0.02€

<sup>25</sup> During the year of 2010 the average market price of the shares was 2.19€ and the exercise price of the options was 3.84€, therefore these options are anti-dilutive because its exercise would cause a reduction in the number of ordinary shares outstanding.

<sup>26</sup> To compute diluted EPS when there is an effect of convertible bonds there is an interest associated to these bonds that has to be added to the earnings attributable to common shareholders (numerator). Besides, the dilution effect of convertible bonds also has to be added to the weighted average number of shares (denominator), in order to reflect the scenario under which all dilutive instruments would be converted.

#### ***Reasons explaining the differences between basic and diluted EPS (RQ 4)***

Out of the 46 Portuguese companies listed in the Euronext, seven present a basic EPS different from diluted EPS<sup>27</sup>. Table 6 identifies the companies presenting a difference between basic EPS and diluted EPS, explaining the reasons behind it and quantifying its size.

Table 6 – Basic EPS *versus* diluted EPS.

Companies Basic EPS ≠ Diluted EPS	Reasons for Difference	Size of Difference (Basic EPS – Diluted EPS)	
		Year 2009	Year 2010
<b>BPI</b>	Not disclosed.	0.001€	0.002€
<b>Banif, SGPS</b>	<i>VMCO's</i> <sup>28</sup> .	0,01€	0,01€
<b>Cofina, SGPS</b>	Dilution effect of warrants in 2009.	0.01€	-
<b>Novabase, SGPS</b>	Dilution effect of stock options in 2009.	0.01€	-
<b>Portugal Telecom, SGPS</b>	Dilution effect of convertible bonds in 2009.	0.02€	-
<b>SAG GEST, SGPS</b>	Not disclosed.	-0.00446€	-0.01758€
<b>Sonae, SGPS</b>	Shares relative to performance bonuses deferred; Shares that could be acquired at average market price.	0.000105€	0.000374€

Referring to table 6, BPI only presents its EPS values in the income statement, not disclosing any additional information regarding this ratio under the notes. Therefore, it is not possible to perceive what originates the difference between basic and diluted EPS proving that the company should improve its financial reporting, making it clearer. Banif SGPS attributes its EPS difference to the existence of *VMCO'S*. SAG GEST

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<sup>27</sup> The following companies were not considered for this specific analysis: Sporting, SAD; and Imobiliária Construtora Grão-Pará. The first company was left out given it only presents basic EPS for 2009 and 2010. Surely, if diluted EPS is not mentioned in this report, there cannot be a comparison. The case of Imobiliária Construtora Grão-Pará is a different one since this company does not present any EPS values at all.

<sup>28</sup> *Valores Mobiliários Obrigatoriamente convertíveis (VMCO)*, are a specific type of securities, with limited duration, which require companies that issue them to deliver to the investor, at a pre-determined date, a certain amount of shares or bonds.

SGPS informs in the notes how to compute diluted EPS but not basic, thus the reason behind the difference of the values is not explicable either. Sonae, SGPS attributes its different EPS values to some transactions in the weighted average number of ordinary shares<sup>29</sup>. The remaining three companies are representative of the dilution effect of convertible securities like stock options, warrants and convertible bonds. In what respects to the size of these differences it is possible to immediately verify that these are very low numbers, meaning that the few companies presenting a basic EPS different from the diluted one, are presenting an almost non relevant difference between the two values.

From the above, it is possible to highlight the low averages of EPS amounts, reflecting the difficult year of 2010 for companies in Portugal, marked by the Financial Crisis. This problematic year also reduces the probability of companies voluntarily commenting anything on EPS. This only happens for cases where there is an increase in EPS. The majority of the companies comply with the regulation as regards to presentation and disclosure, especially if they are SGPS. Possibly this is because SGPS companies are usually bigger and more sophisticated, reinforcing the need of regulation being respected. Yet, some mentioned companies evidently need to improve its EPS financial reporting. The few existent dilutive effects are not very relevant in terms of size and it was also concluded that when basic EPS do differs from diluted EPS, the reasons explaining the difference are not always associated to dilutive securities.

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<sup>29</sup> These transactions are the addition of shares relative to deferred performance bonuses and shares that could be acquired at the average market price to the weighted average of shares outstanding.

## 6. Conclusion

The purpose of this project was to get a deeper insight on Portuguese companies, specifically on the peculiarities of their financial reporting, regulation and practices regarding EPS. This is a high valued ratio by investors, analysts and shareholders, whose importance has significantly increased. Nevertheless, there are few publications on EPS and Portuguese companies until the date, making this project a contribution to the existing literature. The review of the financial reporting regulation (namely IAS 33) and previous normative and empirical research helped to develop the research questions, which referred mainly to the analysis of the financial annual reports of Portuguese companies. The results revealed that EPS amounts in 2009 and 2010 reflect the Financial Crisis of 2010 and showed that some mentioned companies evidently need to improve their EPS financial reporting. Besides, companies only voluntarily comment what is more convenient and the existence of dilutive securities is not very significant in Portugal.

Being the first research about EPS reporting practices of Portuguese companies, a major contribution of this research is to create a starting point for the study of the reporting patterns in Portugal. Therefore, future research on this topic can use the database created by this Project as a preliminary point, adding more companies, different periods of analysis and more variables. For instance, exploring non-listed companies and their reporting practices in 2011 and 2012 would also be interesting given the economic conjuncture being lived in Portugal. This project also contributes to improve the Portuguese companies' practices, as it can be used as a reference for some mentioned organizations.

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## 8. APPENDICES

### Appendix 1 – Final Sample

#### List of Companies included in Final Sample\*

1. Altri SGPS, S.A.	24. Jerónimo Martins SGPS S.A.
2. Banco Comercial Português, S.A.	25. Lisgráfica - Impressão e Artes Gráficas, S.A.
3. Banco Espírito Santo, S.A.	26. Martifer, SGPS, S.A.
4. Banco Português de Investimento, S.A.	27. Media Capital SGPS S.A.
5. Banco Internacional do Funchal, SGPS, S.A.	28. Mota-Engil, SGPS, S.A.
6. Sport Lisboa e Benfica - Futebol, SAD	29. Novabase, SGPS, S.A.
7. Brisa - Auto-Estradas de Portugal, S.A.	30. Sociedade Comercial Orey Antunes
8. Cimpor Cimentos de Portugal SGPS, S.A.	31. Portucel - Empresa Produtora de Pasta e Papel, S.A.
9. Cofina SGPS S.A.	32. Portugal Telecom, SGPS, S.A.
10. Compta - Equipamentos e Serviços de Informática, S.A.	33. Reditus - SGPS, S.A.
11. Corticeira Amorim, SGPS, S.A.	34. REN - Redes Energéticas Nacionais, SGPS, S.A.
12. EDP - Energias de Portugal S.A.	35. Soares da Costa, SGPS, S.A.
13. EDP Renováveis, S.A.	36. SAG GEST - Soluções Automóveis Globais SGPS S.A.
14. Estoril Sol, SGPS, S.A.	37. Semapa - Sociedade de Investimento e Gestão, SGPS, S.A.
15. F. Ramada - Investimentos, SGPS, S.A.	38. Sonae, SGPS, S.A.
16. Fisipe - Fibras Sintéticas de Portugal, S.A.	39. Sonae Capital SGPS, S.A.
17. Futebol Clube do Porto - Futebol SAD	40. Sonae Indústria, SGPS, S.A.
18. Galp Energia SGPS, S.A.	41. Sonaecom SGPS S.A.
19. Glintt - Global Intelligent Technologies, SGPS, S.A.	42. Sporting - Sociedade Desportiva de Futebol, SAD
20. Ibersol - SGPS, S.A.	43. Sumol+Compal, S.A.
21. Imobiliária Construtora Grão-Pará, S.A.	44. Teixeira Duarte - Engenharia e Construções, S.A.
22. Impresa - SGPS, S.A.	45. Toyota Caetano Portugal, S.A.
23. Inapa-Investimentos Participações e Gestão, S.A.	46. ZON Multimédia, SGPS, S.A.

\* VAA - Vista Alegre Atlantis, SGPS, S.A. was excluded from the final sample since, in 2009 the company was going bankrupt and an acquisition by *Visabeira* was under negotiation.

## 9. Other Information

This section includes information that is not indispensable for the full comprehension of the report, but that may be useful to help reading it.

### 9.1. Reporting EPS under IAS 33 *versus* SFAS 128

	Date of Issue	Scope
IAS 33	February 1997	Applies to: - entities with publicly traded securities; - entities in the process of issuing such shares; - entities who voluntarily chose to present EPS.
SFAS 128	February 1997	Applies to: - entities with publicly traded securities; - entities in the process of issuing such shares; - entities who voluntarily chose to present EPS.

### Computation of Basic EPS

IAS 33	<p>Profit or loss attributable to common stockholders of the parent entity divided by the weighted average number of common shares outstanding.</p> <p><b>Numerator</b></p> <p>Amounts attributable to common stockholders are:</p> <ul style="list-style-type: none"><li>-profit or loss from continuing operations attributable to the parent entity;</li><li>-profit or loss attributable to the parent entity.</li></ul> <p>These amounts should be adjusted for the after-tax amounts of: preference dividends, differences arising on the settlement of preference shares, and similar effects of preference shares classified as equity.</p> <p><b>Denominator</b></p> <p>The weighted average number of common shares is the number of common shares outstanding at the beginning of the period adjusted by the number of shares bought back or issued during the period multiplied by a time-weighting factor (number of days that the shares are outstanding as a proportion of the total number of days in the period) (IAS 33.20).</p>
SFAS 128	<p>Income available for common stockholders divided by the weighted average number of common shares outstanding.</p> <p><b>Numerator</b></p> <p>Income for common stockholders should be deducted by:</p> <ul style="list-style-type: none"><li>-dividends declared in the period on preferred stock (paid or not);</li><li>-dividends accumulated for the period on cumulative preferred stock (earned or not);</li></ul> <p>from income from continuing operations and from net income.</p> <p><b>Denominator</b></p> <p>The weighted average number of common shares is the number of common shares outstanding at the beginning of the period adjusted by the number of shares bought back or issued during the period multiplied by a time-weighting factor (number of days that the shares are outstanding as a proportion of the total number of days in the period).</p>

### Computation of Diluted EPS

<p><b>IAS 33</b></p>	<p>Profit or loss attributable to common shareholders of the parent entity should be adjusted and divided by the weighted average number of shares outstanding adjusted for the effects of all dilutive potential common shares.</p> <p><b>Numerator</b> Amounts attributable to common stockholders must be adjusted for:</p> <ul style="list-style-type: none"> <li>-dividends on dilutive potential common shares;</li> <li>-Interest on dilutive potential common shares;</li> <li>-any other changes in income or expense that would result from the conversion of the dilutive potential common shares.</li> </ul> <p><b>Denominator</b> The number of shares is the one calculated for basic EPS plus the weighted average number of common shares that would be issued if all dilutive potential common shares were converted into common shares. It is assumed that dilutive securities are converted into common shares at the beginning of the period or, if later, at the date of the issue of the potential common shares.</p>
<p><b>SFAS 128</b></p>	<p>Profit or loss attributable to common shareholders of the parent entity should be adjusted and divided by the weighted average number of shares outstanding adjusted for the effects of all dilutive potential common shares.</p> <p><b>Numerator</b> Amounts attributable to common stockholders must be adjusted for:</p> <ul style="list-style-type: none"> <li>-dividends on dilutive potential common shares;</li> <li>-Interest on dilutive potential common shares;</li> <li>-any other changes in income or expense that would result from the conversion of the dilutive potential common shares.</li> </ul> <p><b>Denominator</b> The number of shares is the one calculated for basic EPS plus the weighted average number of common shares that would be issued if all dilutive potential common shares were converted into common shares. It is assumed that dilutive securities are converted into common shares at the beginning of the period or, if later, at the date of the issue of the potential common shares.</p>

## Presentation

<b>IAS 33</b>	<p>Basic and diluted EPS must be presented in the face of the income statement for:</p> <ul style="list-style-type: none"> <li>-profit or loss from continuing operations (if presented);</li> <li>-profit or loss for the period for each class of common shares.</li> </ul> <p>Basic and diluted EPS must be presented with equal prominence and even if the amounts are negative (loss per share).</p>
<b>SFAS 128</b>	<p>Entities must present basic and diluted EPS for income from continuing operations and for net income on the face of the income statement. Moreover, entities reporting discontinued operations, extraordinary items, or the cumulative effect of an accounting change, are required to present basic and diluted EPS for those line items in the face of the income statement or in the notes.</p> <p>Basic and diluted EPS must be presented with equal prominence and even if the amounts are negative (loss per share).</p>

## Disclosure

<b>IAS 33</b>	<p>An entity must disclose:</p> <ul style="list-style-type: none"> <li>-the amounts used as numerators when calculating basic and diluted EPS;</li> <li>-the weighted average number of common shares used as the denominator in the calculation of basic and diluted EPS;</li> <li>-instruments that could potentially dilute basic EPS in the future, but were not included in the calculation of diluted EPS because they are antidilutive for the periods presented.</li> <li>-description of common share transactions or potential common share transactions, that occur after the reporting period and that would have changed the number of common shares or potential common shares outstanding at the end of the period if those transactions had occurred before the end of the reporting period.</li> </ul>
<b>SFAS 128</b>	<p>It is required to disclose a reconciliation of the numerators and denominators of the basic and diluted EPS computations, so that the dilutive effects of certain securities can be better understood.</p>

## 9.2. Literature Review Systematized

Author (date)	Objective	Methodology and Sample	Results
<b>1<sup>st</sup> Group: APB Opinion 15, PEPS and FDEPS before SFAS 128 and IAS 33</b>			
Frank and Weygandt (1970)	Explore the theoretical weaknesses regarding the test of APB 15 to determine common stock equivalents.	Descriptive Statistics. Twenty-eight convertible bonds sampled in the period between 1965 and 1968.	Concludes that Opinion 15 had been leading to misclassifications and confusions to the users of financial statements and suggests alternative tests to determine common stock equivalents.
Shank (1971)	Highlight a problem area concerning the calculation of EPS under the treasury stock method as proposed in APB 15.	Exploratory nature. One hypothetical firm.	It is illustrated that Opinion 15 made the accounting profession much more close to market price information and pro forma computations than had been the case before.
Curry (1971)	Illustrate the implications of the common stock equivalent method utilized by APB Opinion 15.		Suggests a new method for convertible debt that overcomes the limitations of APB's methods.
Frankfurter and Horwitz (1972)	Evaluate the predictability of APB's principle for the conversion of common stock equivalents.	Simulation Model. Three hypothetical firms with different debt structures.	Opinion 15 had brought no improvements over the traditional methods to calculate PEPS and FEPS, and imposes an administrative burden on management.
Gibson and Williams (1973)	Analyze the APB's methods for determining common stock equivalents.		Argues that the criterion to determine common stock equivalents by APB 15 is not meaningful.
Rhodes and Snively (1973)	Determine how effectively the yield test discriminates between convertible debenture issues.	Descriptive Statistics. 615 firms with outstanding convertible bond issues	Concludes that APB 15 rules are not relevant to determine potential dilution of convertible securities since the "yield-test" was not effective determining conversion and probability of conversion.

Arnold and Humann (1973)	Explore two methods rejected by APB 15: "Investment Value" and "Market Parity", in order to predict conversion of the convertible bonds.	Discriminant Analysis. Convertible bonds issued in 1965	The Investment Value method did not produce any predictive power for the 1965 bonds, however the Market Parity Method did show some predictive power.
Barlev (1983)	Analyze the Modified Treasury Stock (MTS) Method prescribed in APB 15.		It is shown that the MTS method suffers some deficiencies that reduce dilutive effects leading to some potential manipulation of these effects.
<b>2<sup>nd</sup> Group: SFAS 128 and IAS 33 and Basic and Diluted EPS</b>			
Jennings, LeClere and Thompson (1997)	Analyze the impacts of the new standard SFAS 128 in investors and in stock prices.	Large Sample of NYSE and Amex listed companies from 1989 to 1995.	Concludes that investors are better off with the new standard - SFAS 128, since it provides access to better information due to its enhanced disclosure requirements.
Gregor Andrade (1999)	Test if there is any relation between EPS accretion and both announcement and long-term abnormal returns for acquiring firms in mergers and acquisitions.	Sample of 224 transactions completed between 1975 and 1994.	Concludes that EPS accretion has a positive and statistically significant effect on acquirer abnormal performance. The magnitude of the effect is higher for firms with a larger percentage of unsophisticated investors.
Huson, Scott and Wier (2001)	Model the effect of expected dilution on the earnings/return relation.		Dilutive securities attenuate the relation between earnings and returns. The effect is more evident for firms with price increases or positive earnings news since these, increase the expected dilutive effect of conversions.
<b>2.1.: Option Valuation Models as alternative measures of EPS.</b>			
Vigeland (1982)	Reconsider the APB 15 method of dealing with dilutive securities in EPS calculations due to the development of equilibrium pricing models for options and convertible securities.	Uses a stochastic model of security price behavior.	It is shown that is possible to be precise about the timing of voluntary conversion or exercise of potential dilutive securities and to know the probability of future stock prices reaching levels that would allow conversion or exercise.

Jerris (1992)	Investigate the proposed changes to APB 15 by examining empirical evidence of other studies about conversion predictability and the information content of earnings.		Finds that alternative measures of EPS numbers, such as earnings based on conversion probabilities and basic (raw) earnings, showed to be more correlated with stock price changes than primary or fully diluted EPS.
Core, Guay and Kotheri (2001)	Focus on the measurement of the denominator of EPS and provide evidence that diluted EPS computed under the FASB treasury-stock method underestimates the economic dilutive effects of outstanding options.	Firm-wide data on 731 employee stock option plans.	Shows that the treasury stock method of FASB understates the dilutive effect of stock options, thus overstating reported EPS.
Casson and McKenzie (2007)	Explore alternative methods for computing EPS for a company with a capital structure including ordinary shares and warrants.	Simulation Method.	Shows that imputed earnings method of computing EPS is more accurate than the treasury stock method favored by accounting standards boards.



### 9.3. Sample aggregation by industry

#	Industry	# Companies	%
1	Paper Pulp and Cement	4	8.70%
2	Financial Services	4	8.70%
3	Sport Clubs	3	6.52%
4	Transport Infrastructures, Construction and Industries	3	6.52%
5	Media	3	6.52%
6	IT, Computer Services	4	8.70%
7	Cork, Wood-based Products	2	4.35%
8	Energy	4	8.70%
9	Tourism, Gambling, Housing	2	4.35%
10	Steel, Metallic Construction	2	4.35%
11	Acrylics	1	2.17%
12	Printing Industry	2	4.35%
13	Food Distribution and industries	4	8.70%
14	Civilian Construction	3	6.52%
15	Telecommunications and Multimedia	3	6.52%
16	Automotive Industry	2	4.35%
<b>Total</b>		<b>46</b>	<b>100%</b>

#### 9.4. Basic EPS and Diluted EPS of Portuguese Companies in 2009 and 2010

#	Companies	Basic EPS 2009	Basic EPS 2010	Diluted EPS 2009	Diluted EPS 2010
1	Altri SGPS, S.A.	-0.12	0.6	-0.12	0.6
2	Banco Comercial Português, S.A.	0.03	0.04	0.03	0.04
3	Banco Espírito Santo, S.A.	0.49	0.41	0.49	0.41
4	Banco Português de Investimento, S.A.	0.196	0.207	0.195	0.205
5	Banco Internacional do Funchal, SGPS, S.A.	0.14	0.07	0.13	0.06
6	Sport Lisboa e Benfica - Futebol, SAD	-2.32	-0.83	-2.32	-0.83
7	Brisa - Auto-Estradas de Portugal, S.A.	0.26	1.35	0.26	1.35
8	Cimpor Cimentos de Portugal SGPS, S.A.	0.36	0.36	0.36	0.36
9	Cofina SGPS S.A.	0.17	0.05	0.14	0.05
10	Compta - Equipamentos e Serviços de Informática, S.A.	-0.02	-0.01	-0.02	-0.01
11	Corticeira Amorim, SGPS, S.A.	0.039	0.162	0.039	0.162
12	EDP - Energias de Portugal S.A.	0.28	0.3	0.28	0.3
13	EDP Renováveis, S.A.	0.13	0.09	0.13	0.09
14	Estoril Sol, SGPS, S.A.	0.77	0.36	0.77	0.36
15	F. Ramada - Investimentos, SGPS, S.A.	0.07	0.2	0.07	0.2
16	Fisipe - Fibras Sintéticas de Portugal, S.A.	0.012	-0.011	0.012	-0.011
17	Futebol Clube do Porto - Futebol SAD	0.34	0.01	0.34	0.01
18	Galp Energia SGPS, S.A.	0.42	0.53	0.42	0.53
19	Glintt - Global Intelligent Technologies, SGPS, S.A.	0.036	0.041	0.036	0.041
20	Ibersol - SGPS, S.A.	0.81	0.81	0.81	0.81
21	Imobiliária Construtora Grão-Pará, S.A.	-	-	-	-
22	Impresa - SGPS, S.A.	0.0463	0.0599	0.0463	0.0599
23	Inapa-Investimentos Participações e Gestão, S.A.	0.014	0.024	0.014	0.024
24	Jerónimo Martins SGPS S.A.	0.3188	0.4472	0.3188	0.4472
25	Lisgráfica - Impressão e Artes Gráficas, S.A.	-0.0517	-0.0471	-0.0517	-0.0471
26	Martifer, SGPS, S.A.	1.0771	-0.5493	1.0771	-0.5493
27	Media Capital SGPS S.A.	0.2084	0.1467	0.2084	0.1467
28	Mota-Engil, SGPS, S.A.	0.3749	0.1908	0.3749	0.1908
29	Novabase, SGPS, S.A.	0.43	0.43	0.42	0.43
30	Sociedade Comercial Orey Antunes	0.103	0.235	0.103	0.235
31	Portucel - Empresa Produtora de Pasta e Papel, S.A.	0.14	0.28	0.14	0.28
32	Portugal Telecom, SGPS, S.A.	0.74	0.19	0.72	0.19
33	Reditus - SGPS, S.A.	0.003	0.1575	0.003	0.1575
34	REN - Redes Energéticas Nacionais, SGPS, S.A.	0.25	0.21	0.25	0.21
35	Soares da Costa, SGPS, S.A.	0.072	0.097	0.072	0.097
36	SAG GEST - Soluções Automóveis Globais SGPS S.A.	-0.04071	-0.16022	-0.04517	-0.1778
37	Semapa - Sociedade de Investimento e	0.698	1.123	0.698	1.123

	Gestão, SGPS, S.A.				
38	Sonae, SGPS, S.A.	0.050192	0.089831	0.050087	0.089457
39	Sonae Capital SGPS, S.A.	0.096505	-0.047388	0.096505	-0.047388
40	Sonae Indústria, SGPS, S.A.	-0.4199	-0.5317	-0.4199	-0.5317
41	Sonaecom SGPS S.A.	0.02	0.12	0.02	0.12
42	Sporting - Sociedade Desportiva de Futebol, SAD	-0.64	-1.26	-	-
43	Sumol+Compal, S.A.	-0.06	0.09	-0.06	0.09
44	Teixeira Duarte - Engenharia e Construções, S.A.	0	0.13	0	0.13
45	Toyota Caetano Portugal, S.A.	0.293	0.341	0.293	0.341
46	VAA - Vista Alegre Atlantis, SGPS, S.A.	-0.124	-0.007	-0.124	-0.007
47	ZON Multimédia, SGPS, S.A.	0.15	0.12	0.15	0.12